

CITY OF SANTA MONICA
PUBLIC WORKS/WATER RESOURCES DIVISION

ANNUAL WATER QUALITY REPORT

JUNE 2014



IMPORTANT INFORMATION
AND TIPS ON WATER QUALITY
AND SAFETY

<http://waterquality.smgov.net>



Water Quality Is Everybody's Business

Environmental awareness extends beyond the air we breathe and food we eat. Citizens across the country have asked to be kept informed about the quality of their water. In response, Congress and the California Legislature have passed laws that require water agencies to provide an annual water quality report to their customers.

This report gives an overview of how the City of Santa Monica Public Works/Water Resources Division provides your tap water and explains the many steps we take to ensure the quality and safety of our water. In addition, we provide you results of our water testing to ensure the quality of the water delivered for your consumption.

If you require this report in an alternate format, please call us at (310) 826-6712 or email myriam.cardenas@smgov.net.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Dear Santa Monica Residents,

No doubt you've heard about the statewide drought affecting California. In January 2014, the Governor declared a state of emergency, calling for a 20 percent reduction in water use across all water-using sectors in the State. With the driest year in recorded history upon us, Santa Monica can do its part by heeding our own City Council's call for a voluntary 20 percent reduction in support of the Governor's action. While the 20% reduction is voluntary, the City's drought response plan contains various stages of mandatory reduction stages which could be triggered if drought conditions continue.

Our efforts to become water self-sufficient by the year 2020 dovetail with the ongoing conservation efforts we need to achieve this goal. Water self-sufficiency means managing our water supply in a manner such that we no longer need to import water. In order to eliminate the city's reliance on water from Northern California and the Colorado River, we're working hard to develop programs to enhance opportunities for additional water conservation/water reuse, while at the same time identifying potential water supply improvements, and continuing to effectively use our existing local supplies.

In the coming year, projects are planned to improve and upgrade aging delivery infrastructure throughout the City for both water and wastewater systems. Other projects include pumping station and communication system improvements for system reliability and efficiency as well as the initiation of the process to design and build a second groundwater treatment plant.

Your City Water Resources Division continues the day to day activities of maintaining the water production and delivery systems needed to bring you safe and pleasant tasting water. One of our most important functions is the sampling and testing of over 10,000 samples per year to ensure the water you receive at your homes and businesses meets or exceeds all federal and state drinking water regulations. This report provides information about the quality of your water. We would be delighted to hear from you with any questions or concerns you may have.

Keep drinking the tap water, Santa Monica! And to learn more ways to reduce your water consumption visit www.sustainablesm.org/water. On behalf of the City of Santa Monica; Public Works Management and the employees of the Water Resources Division, we thank you for your interest and patronage of the water system.



Sincerely,

Gil Borboa

Gil Borboa
Water Resources Manager



Producing Great Water

Santa Monica's Water Treatment Works

The City's new Arcadia treatment plant has been operating for three years now and has been producing good quality and great tasting water every day.

The water that is treated and eventually pumped to homes and businesses in Santa Monica originates as groundwater in and around Santa Monica. The majority of the groundwater comes from the Charnock Well Field, which has been used as a drinking water source for Santa Monica since 1924.

The well field was shut down for several years when testing revealed that the gasoline additive, Methyl tert-Butyl Ether (MTBE) had infiltrated the aquifer supplying the wells. The source of the gasoline compound was leakage from underground storage tanks at gasoline service stations in the vicinity. The City of Santa Monica pursued restitution and eventually reached a settlement agreement with the principal responsible parties to remediate and restore the well field as a drinking water source.

The Charnock Well Field Restoration Project culminated in the reactivation of the well field and the launching of the new treatment plant in December 2010. A primary component of the treatment works is the Granular Activated Carbon (GAC) filtration system, which removes MTBE and another potential gasoline additive, tert-Butyl Alcohol (TBA) in the groundwater at the Charnock Well Field.



The water from the Charnock Well Field is then combined with the flow from other wells and delivered to the City's main treatment facility in West Los Angeles where it undergoes a 5 step process to eliminate/reduce any remaining contaminants and achieve drinking water quality.

A major component of the treatment facility is the Reverse Osmosis (RO) softening system and the final adjustments including fluoridation and disinfection. Softening is the process of removing scale-forming calcium and magnesium from hard water. Reverse Osmosis (RO) is a method of softening that separates the scale-forming minerals by forcing hard water through membranes with very small pores.

Water quality is scrutinized throughout the treatment plant with many online analyzers monitoring the process as well as various daily, weekly and monthly samples to verify the quality. The complete treatment process is outlined on the following pages.

This facility is currently producing 60% of the water utilized by Santa Monica with the potential of producing 70% of the water supplied to the city. This greatly reduces our reliance on imported water obtained through the Metropolitan Water District. For more information about the new treatment facilities, please call the plant staff at (310) 826-6712.

Santa Monica Water Treatment Process

CHARNOCK WELL FIELD



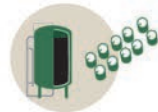
Charnock Wells

Groundwater contaminated with the gasoline additive MTBE is pumped up from 400 feet below ground surface.



Greensand Filtration

The well water is filtered through greensand media to remove iron and manganese which would foul the carbon filters.



GAC Filtration

The MTBE is removed by filtering through Granular Activated Carbon (GAC) filters.



Pump to Treatment Plant

The filtered water is combined with the flow of other wells and pumped to the Santa Monica Water Treatment Plant.

SANTA MONICA WATER TREATMENT PLANT

Pretreatment

To protect the sensitive Reverse Osmosis (RO) filters, the combined well flow is filtered again through greensand and cartridge filters to remove more iron, manganese and any remaining sediment.



Reverse Osmosis Filtration

Reverse Osmosis Filtration

Filtration through a three-stage Reverse Osmosis (RO) membrane system softens the water by removing minerals (calcium and magnesium). RO uses pressure to force water through membranes with pores so small the minerals can't pass through.

Water Quality Adjustments

The mineral content is adjusted to the desired softness. The pH is adjusted, fluoride is added and the water undergoes final disinfection with chloramine.

Aeration and Storage

The final step, aeration, uses the existing air stripping technology in the five million gallon reservoir to remove any remaining volatile groundwater contaminants such as trichloroethene (TCE).



Final Delivery

Santa Monica residents and businesses receive water for everyday use. Water conservation by end users is key to ensuring water reliability and sustainability.

Ensuring the Safety of Santa Monica's Water Supply

Our drinking water meets or exceeds all State and Federal water quality requirements. The safety of Santa Monica's drinking water supply is of paramount importance.

More than 10,000 water quality tests are conducted each year at Santa Monica's State-certified laboratory by qualified chemists and technicians to ensure the safety of the city's supply. The City of Santa Monica Public Works/Water Resources Division expends considerable resources keeping its water treatment system up to date and performing properly.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Their presence does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at (800) 426-4791.



Sources of Water

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before it is treated include:

- Microbial contaminants such as viruses and bacteria, which may come from sewage systems, septic tanks, agricultural livestock operations and wildlife.
- Inorganic contaminants such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.**
- Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses.
- Radioactive contaminants, which are naturally occurring.
- Organic chemical contaminants including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Public Health (DPH) prescribe limits on certain contaminants in water provided by public water systems. DPH regulations also establish limits for contaminants in bottled water to provide the same protection for public health.

*** You can help protect the purity of source water by helping control what goes into the storm drain and water table: Reduce use of hazardous products, clean up after pets, recycle used motor oil, sweep walks and alleys instead of hosing.*

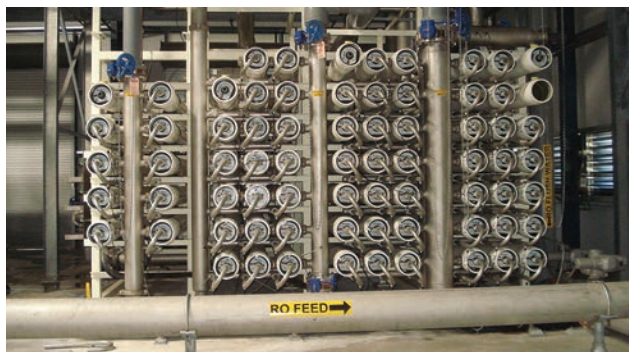
Call (310) 458-8532 to report storm drain pollution and (310) 458-2255 for information on alternatives to toxic cleaning products and pesticides.

Our Treated Water

Santa Monica recently had to rely on imported water sources for more than 85% of our supply. However, with the restoration of the Charnock Well Field and opening of an enhanced water treatment facility three years ago along with continued water conservation; we have the potential to reduce the demand for imported water to 30% of our needs. Additionally, more projects and conservation measures are being planned with the goal of eliminating the need to import water by 2020.

The imported water we consume is purchased from the Metropolitan Water District (MWD). MWD provides supplemental water to about 300 cities and unincorporated areas in Southern California, importing water from two separate sources. Colorado River water is delivered from Lake Havasu by means of a 242-mile-long aqueduct. This water originates as snowmelt from mountainous regions of Utah, Wyoming and Colorado. MWD also distributes State Project water from the Sacramento-San Joaquin Delta and delivers it to Southern California by means of the 441-mile-long California Aqueduct. Water from the aqueducts is filtered at MWD's six modern treatment plants, using chloramine for disinfection.

In March and June of 2012, MWD completed a source water assessment of its Colorado and State Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting MWD at (213) 217-6850.



About the Tables

Santa Monica's water supply undergoes constant, rigorous testing at the Water Treatment Plant by plant operators and chemists at our Water Quality Laboratory. Permission and oversight to operate a community water system is granted by the California Department of Public Health and the U.S. Environmental Protection Agency. Santa Monica has a perfect compliance record in regards to water quality.

The next few pages summarize the past year's results for the tests we are required to perform to satisfy Federal and State regulations for our local well water as well as the water we import. However, testing the water coming out of the treatment plant is not enough. We also test the water at 100 locations throughout the city each month to ensure the quality of delivered water.

The results are presented in two sections- Primary Drinking Water Quality Results and Secondary Drinking Water Quality Results. The Primary Results are for the tests we perform for contaminants that may affect the public's health. These contaminants include hazardous chemicals, metals, bacteria, and radioactivity. Santa Monica's water is below permissible Maximum Contaminant Levels (MCL) for all contaminants.

The Secondary Results are for the tests we perform for parameters that may affect the aesthetics of the water such as taste, appearance, and odor. These parameters include turbidity, minerals, and pH among others. Again, Santa Monica's water meets all regulatory requirements for these parameters.

For questions regarding water quality, call the Water Quality Laboratory staff at (310) 826-6712.

Summary of Results for Primary Drinking Water Standards for 2013

Parameter	PHG/ [MCLG]/ {MRDLG}	State MCL/ {MRDL}	LOCAL WELL WATER Arcadia Plant		SM WELL #1(a)		IMPORTED SURFACE WATER Weymouth Plant		IMPORTED SURFACE WATER Jensen Plant		Dates Sampled if other than 2013(b)	Meets Std	MAJOR SOURCES IN DRINKING WATER
			Average	Range	Average	Range	Average	Range	Average	Range			
PRIMARY DRINKING WATER STANDARDS (MANDATORY HEALTH-RELATED STANDARDS)													
Clarity													
Maximum Turbidity (NTU)	NS	95% <0.3	N/A	N/A	N/A	N/A	0.05	100% <0.3	0.1	100% <0.3		Y	Soil runoff
Microbiological													
Total Coliform Bacteria	[0]	5%	City-wide Maximum: 0 Positive Samples									Y	Naturally present in the environment
(% positive samples/month)													
Fecal Coliform/E. Coli	[0]	(c)	City-wide Maximum: 0 Positive Samples									Y	Human and animal fecal waste
Organic Chemical													
Methyl tert-Butyl Ether (MTBE) (ppb)	13	13(5*)	ND	ND	ND	ND	ND	ND	ND	ND		Y	Leaking underground storage tanks
Trichloroethylene (ppb)	1.7	5	ND	ND	ND	ND	ND	ND	ND	ND		Y	Discharge from metal degreasing sites
Toluene (ppb) (e)	150	150	ND	ND - 1.8	ND	ND	ND	ND	ND	ND		Y	Discharge from petroleum based products
Disinfection													
Byproducts & Residuals													
Total Trihalomethanes (ppb)	NS	80	City-wide LRAA: 16 Range: 1 - 52									Y	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NS	60	City-wide LRAA: 5 Range: ND - 18									Y	By-product of drinking water chlorination
Total Chlorine/Chloramines (ppm)	{4}	{4}	City-wide Average: 1.4 Range: 0.2 - 2.4									Y	Drinking water disinfectant added for treatment
Bromate (ppb)	0.1	10	N/A	N/A	N/A	N/A	N/A	N/A	7.6	3.9 - 13		Y	By-product of drinking water ozonation
Inorganic Chemicals													
Aluminum (ppm)	0.6	1 (0.2*)	ND	ND	ND	ND	0.14	0.1 - 0.22	0.10	0.07 - 0.11		Y	Erosion of natural deposits; used in water treatment process
Arsenic (ppb)	0.004	10	ND	ND	ND	ND	ND	ND	ND	ND		Y	Erosion of natural deposits
Barium (ppm)	2	1	0.02	0.02	0.09	0.09	ND	ND	ND	ND		Y	Discharge from oil and metal industries; Erosion of natural deposits
Copper (d) (ppm)	0.3	AL=1.3 (1.0*)	City-wide 90th percentile: 0.13 0 sites out of 33 exceeded the AL									Y	Corrosion of household plumbing systems
Fluoride After Treatment (ppm)	1	2	Control Range 0.7 - 1.3 City-wide Range 0.6 - 1.0									Y	Water additive for dental health
Lead (d) (ppb)	0.2	AL=15	City-wide 90th percentile: 2.8 0 site out of 34 exceeded the AL									Y	Corrosion of household plumbing systems
Nitrate (as N) (ppm)	10	10	0.8	0.5 - 1.1	3.7	3.6 - 3.8	0.5	0.5	.05	0.5		Y	Runoff from fertilizer use; Leaching from sewage; Erosion of natural deposits
Perchlorate (ppb)	6	6	ND	ND	ND	ND	ND	ND	ND	ND		Y	Industrial waste discharge
Radionuclides													
Alpha emitters (pCi/l)	[0]	15	ND	ND	ND	ND	ND	ND - 3	ND	ND	2011	Y	Erosion of natural deposits
Beta/photon emitters (pCi/l)	[0]	50	N/A	N/A	N/A	N/A	4	ND - 6	ND	ND	2011	Y	Decay of natural and man-made deposits
Combined Radium (pCi/l)	[0]	5	ND	ND	ND	ND	ND	ND	ND	ND	2011	Y	Erosion of natural deposits
Uranium (pCi/l)	0.43	20	1.8	1.5 - 2.0	ND	ND	2	1 - 2	1	ND - 2	2011	Y	Erosion of natural deposits

KEY TO ABBREVIATIONS

Primary Drinking Water Standards = MCLs, MRDLs and treatment techniques for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG = Public Health Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

MCLG = Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MCL = Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.

MRDLG = Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health. They do not reflect the benefits of the use of disinfectants to control microbials.

MRDL = Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

LRAA = Locational Running Annual Average. The running annual average is based on monitoring location.

AL = Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

NS = No Standard

ND = Monitored for but Not Detected

NTU = Nephelometric Turbidity Units - used to measure cloudiness of drinking water.

ppb = parts per billion, or micrograms per liter (µg/l)

ppm = parts per million, or milligrams per liter (mg/l)

pCi/l = picocuries per liter

* = secondary standard

FOR ADDITIONAL WATER QUALITY QUESTIONS, CONTACT M. CARDENAS, ASSISTANT MANAGER FOR WATER PRODUCTION AND TREATMENT AT 310-826-6712

(a) = SM Well#1 is pumped into a transmission line, is blended with Imported Surface Water and enters the system at 19th St. & Idaho Ave.

(b) = We are not required to test for every parameter each year. If indicated, data is from a previous year.

(c) = Two consecutive Total Coliform-positive samples, one of which contains Fecal Coliform/E. Coli constitutes an acute MCL violation. No violations occurred for 2013.

(d) = The MCL has been replaced with a treatment technique requiring agencies to optimize corrosion control. Results given are from first draw, at-the-tap monitoring performed every three years.

(e) = Toluene is monitored weekly at the Arcadia Plant. In 2013, very low levels of toluene were detected two times after the completion of reservoir roof repairs in June 2013. The detections were traced to a glue used in the repair process.

Summary of Results for Secondary Drinking Water Standards for 2013

Parameter	PHG/ [MCLG]	State MCL	LOCAL WELL WATER Arcadia Plant		SM WELL #1(a)		IMPORTED SURFACE WATER Weymouth Plant		IMPORTED SURFACE WATER Jensen Plant	
			Average	Range	Average	Range	Average	Range	Average	Range
			SECONDARY DRINKING WATER STANDARDS (AESTHETIC STANDARDS)							
<u>Chemical Parameters</u>										
Chloride (ppm)	NS	500	32	28 - 36	107	106 - 108	88	84 - 91	76	75 - 77
Color (units)	NS	15	<5	<5	<5	<5	1	1	2	1 - 2
Iron (ppb)	NS	300	ND	ND - 6	24	10 - 39	ND	ND	ND	ND
Manganese (ppb)	NS	50	ND	ND	7	5 - 9	ND	ND	ND	ND
Odor- Threshold (units)	NS	3	<1	<1	<1	<1	4(c)	3 - 6(c)	3(c)	3(c)
Specific Conductance (µmho/cm)	NS	1600	396	361 - 519	1287	1270 - 1311	870	850 - 890	530	520 - 540
Sulfate (ppm)	NS	500	57	54 - 62	258	250 - 266	180	170 - 190	48	44 - 51
Total Dissolved Solids (ppm)	NS	1000	218	199 - 285	885	852 - 918	530	520 - 540	290	280 - 300
Turbidity (NTU)	NS	5	0.07	0.0 - 0.15	0.17	0.06 - 0.26	ND	ND	ND	ND

Dates Sampled if other than 2013(b)	Meets Std	MAJOR SOURCES IN DRINKING WATER
	Y	Runoff/leaching from natural deposits; industrial wastes
	Y	Naturally-occurring organic materials
	Y	Leaching from natural deposits; industrial wastes
	Y	Leaching from natural deposits
	N	Naturally-occurring organic materials; chlorine
	Y	Substances that form ions when in water; seawater influence
	Y	Runoff/leaching from natural deposits; industrial wastes
	Y	Runoff/leaching from natural deposits
	Y	Soil runoff

UNREGULATED CHEMICALS REQUIRING MONITORING										
Boron (ppb)	NS	NL=1000	100	100	180	180	150	150	160	160
Chromium VI (ppb)	0.02	10*	0.1	0.1	1.5	1.5	ND	ND	ND	ND
Vanadium (ppb)	NS	NL=50	ND	ND	ND	ND	3	3	3.2	3.2

ADDITIONAL PARAMETERS										
Alkalinity (ppm)	NS	NS	91	83 - 100	330	329 - 331	110	76 - 130	84	77 - 93
Calcium (ppm)	NS	NS	31	29 - 37	124	123 - 124	58	56 - 61	24	22 - 26
Hardness (as CaCO3) (ppm)	NS	NS	131	121 - 152	576	559 - 593	240	230 - 250	110	110 - 120
Magnesium (ppm)	NS	NS	12	12	61	61	22	21 - 23	12	12
pH (units)	NS	NS	8.2	8.0 - 8.4	7.2	7.0 - 7.4	8.1	8.1	8.3	8.2 - 8.4
Potassium (ppm)	NS	NS	1	1	3.7	3.7	4.2	4.0 - 4.3	2.6	2.6 - 2.7
Radon (pCi/l) (d)	NS	NS	ND	ND	510	510	ND	ND	ND	ND
Sodium (ppm)	NS	NS	32	30 - 33	86	86	82	79 - 85	58	57 - 60
1, 4-Dioxane (ppb)	NS	NL=1	1.0	0.8 - 1.3	ND	ND	N/A	N/A	N/A	N/A
N-Nitrosodimethylamine (NDMA) (ppt)	3	NL=10	N/A	N/A	N/A	N/A	ND	ND - 3	3	ND - 5
tert-Butyl Alcohol (TBA) (ppb)	NS	NL=12	0.7	ND - 8.9	N/A	N/A	ND	ND	ND	ND

FOR ADDITIONAL WATER QUALITY QUESTIONS, CONTACT M. CARDENAS, ASSISTANT MANAGER FOR WATER PRODUCTION AND TREATMENT AT 310-826-6712

KEY TO ABBREVIATIONS

Secondary Drinking Water Standard = An MCL that applies to any contaminant in drinking water that adversely affects the taste, odor, or appearance of the water.

PHG = Public Health Goal or the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

MCLG = The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MCL = Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

NL = Notification Level, or the concentration of a contaminant that the California Department of Public Health has determined does not pose not a significant health risk, but warrants notification.

N/A = Not Applicable

NS = No Standard

ND = Monitored for, but Not Detected

NTU = Nephelometric Turbidity Units - used to measure cloudiness of drinking water.

ppb = parts per billion, or micrograms per liter (ug/l)

ppm = parts per million, or milligrams per liter (mg/l)

ppt = parts per trillion, or nanograms per liter (ng/l)

umho/cm = micromhos per centimeter

< = less than

* New Standard to take effect July 1, 2014.

(a) = SM Well#1 is pumped into a transmission line, is blended with Imported Surface Water and enters the system at 19th St. & Idaho Ave.

(b) = We are not required to test for each parameter every year. If indicated, data is from a previous year.

(c) = MWD has developed a flavor-profile analysis method that can more accurately identify odor occurrences.

(d) = EPA has proposed a limit of 300 pCi/l for Radon.



Source Water Vulnerability Assessments

Between 2000 and 2012, the California Department of Public Health (DPH) completed Source Water Vulnerability Assessments for all of the City's water wells. The assessments are required for all water utilities nationwide and serve to evaluate the vulnerability of water sources used for drinking water to "possible contaminating activities", which include a wide range of everyday activities in addition to those commonly associated with contamination.

Based on the vulnerability assessments, Santa Monica Wells #3 and #4 located mid-city, Arcadia Wells #4 and #5, and Charnock Wells #13, #16, #18, #19 and #20, located in West L.A. are considered most vulnerable to commercial, industrial, residential and municipal activities.

Santa Monica Well #1, located on the north side, Wells #3 and #4 and the Arcadia Wells are considered most vulnerable by their proximity to sewer collection systems, although analyses have detected no related contamination.

For more information, or to see a copy of the report, contact the Water Resources Division at (310) 826-6712.

Facts about Cryptosporidium

In recent years, a microscopic organism called *Cryptosporidium* has been found in surface waters across the country. *Cryptosporidium* can also be transmitted through contaminated food or direct contact with human or animal waste. The organism can cause a gastrointestinal illness if ingested.

Today's water treatment plants are designed to remove these organisms when present, but 100% elimination cannot be guaranteed. Therefore, a very slight chance of contracting the organism remains. Much research is underway to determine the best way to upgrade treatment plants to improve protection. Our supplier of surface water, MWD, maintains an aggressive program to detect and remove *Cryptosporidium* from the water before delivery to Santa Monica.

Cryptosporidium need not be a concern for healthy people; however, others may be more vulnerable to contaminants in drinking water. Immuno-compromised persons such as cancer patients undergoing chemotherapy, individuals who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly and infants can particularly be at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/ Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA Safe Drinking Water Hotline (800) 426-4791.



Answers to the Most Commonly Asked Questions About Your Tap Water



What Affects the Taste of My Water?

The taste of drinking water is affected by its mineral content as well as the presence of chloramine, which is used to protect against potential bacterial contamination. Sometimes plumbing can cause a metallic flavor, especially if the water has been sitting in the pipes for many hours. Taste, however, does not necessarily indicate a higher or lower degree of water quality.

How Does My Plumbing Affect the Quality of My Water?

Plumbing is unlikely to degrade the quality of your water. If your plumbing is old, you may see a discoloration for a few moments after turning on your tap. This is caused by corrosion of iron or copper pipes, depending on your plumbing, and is generally not considered harmful. More serious pipe corrosion will be evident as leaks and breaks start to occur.

What Type of Disinfectant Is In My Water?

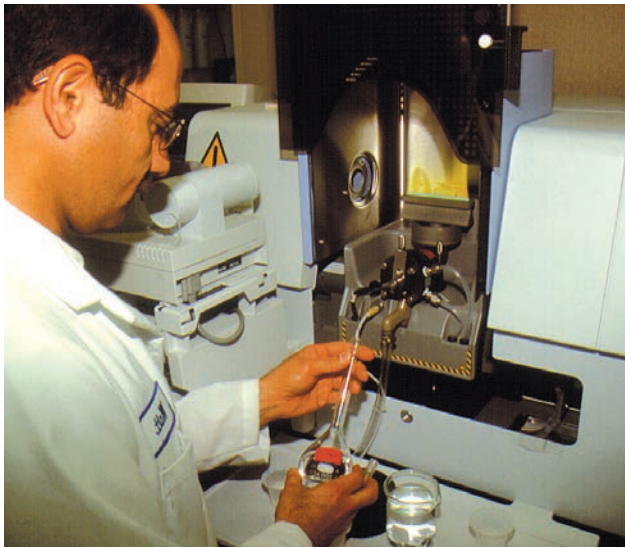
A low level of chloramine disinfectant is added to your tap water to protect you from waterborne pathogens. Chloramine is formed when a small amount of ammonia is added to chlorinated water. This type of disinfectant is very stable and also reduces the formation of disinfection by-products in your water. These by-products are an unintended consequence of the disinfection process, but are far below the allowable limit in Santa Monica water. We carefully monitor the amount of the chloramine disinfectant to protect the safety of your water.



What about Lead from My Plumbing?

If your home plumbing contains lead, it could possibly leach into your water as a result of corrosion. Fortunately, the minerals in our water help to protect against pipe corrosion, greatly reducing the potential of lead entering the water. These minerals form a film called “scale” that prevents water from coming into direct contact with home plumbing.

If present however, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Santa Monica Public Works/ Water Resources Division is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.



What is Chromium 6 And should I be Concerned?

Hexavalent chromium also known as Chromium 6, has been in the news in recent years. The California Department of Public Health (DPH) is in the process of adopting the first-ever Maximum Contaminant Level (MCL) in the nation for Chromium 6. The new MCL will take effect July 1, 2014 and will limit the level of Chromium 6 permissible in drinking water to no more than 10 ppb. This new standard is in addition to the existing California standard limiting the amount of Total Chromium in drinking water to no more than 50 ppb.

Although Chromium 6 is found in industrial processes, it also occurs naturally in groundwater. For the past decade, the Water Quality staff has been monitoring the naturally-occurring levels of Chromium 6 in the city's groundwater wells and has determined that all of the water sources for Santa Monica fall below this new limit. Additionally, the city's new Reverse Osmosis system at the Arcadia Treatment Facility reduces the level of natural-occurring Chromium 6 from our ground water further ensuring the new standard will be easily met.

Do I Really Need to Buy a Water Filter or Home Treatment System?

The decision to buy a water filter or home treatment system is a matter of personal preference. Our water meets or exceeds rigid state and federal health standards. If you decide to buy a filter or system, be a smart shopper and do some homework. Any treatment device you buy should be registered with the National Sanitation Foundation (NSF). There are several system types designed to do different things. Information on treatment systems can be obtained at www.ConsumerReports.org, or from NSF.



*Contact NSF toll free at
(877) 867-3435
or visit www.nsf.org*

What about Bottled Water?

Again, the decision is yours. You may find that keeping a pitcher in your refrigerator is a low-cost, water-thrifty alternative to buying more expensive bottled water, and it's far better for the environment. Even when the bottle is reused or recycled, the petrochemicals used in creating the bottle and the transportation of the water has a significant impact on the environment — *and your wallet.*

Water-Self Sufficiency Goal

Currently, the city uses an average of 12 million gallons a day, but can only produce 8.5 million gallons a day. The additional water needed is purchased and delivered from Northern California or the Colorado River. The City Council has set a goal of water self-sufficiency by 2020, so in order to close this gap between demand and production, we need to save water. The City's Sustainable Water Master Plan will be finalized and released in summer 2014 and will include projects, programs and policies to achieve the goal of water self-sufficiency by 2020.

Here are some simple ways you can conserve water and help our community reach the goal:

- Only use sprinklers before 10 am and after 4 pm any day of the week. Adjust your sprinkler controller each season. Go to www.lacoastalgardens.com to find out how much water your garden needs and when to water. Even better, convert sprinklers to a drip irrigation system, install a rain barrel, or invest in sustainable landscaping. *Rebates and grants up to \$3,000 may be available!*
- Don't allow irrigation water to overspray or runoff your property and never use a hose or a leaf blower to clean driveways, sidewalks, patios, streets, or alleys. *(Potential rebates for landscape conversion are contained in the Sustainable Water Master Plan.)*
- Replace old toilets, showerheads, and clothes washers with high-efficiency models and repair all leaking fixtures on your property. *Rebates up to \$300 for qualified products are available!*
- Turn off water when brushing teeth or shaving and only wash full loads of laundry.

To learn more on reducing your water use visit www.sustainablesm.org/water or call (310) 458-8972.



WATER SELF-SUFFICIENCY BY 2020

Where Can I Get More Information?

City of Santa Monica Public Works/Water Resources Offices:

Water Quality	(310) 826-6712
24 hr Water Emergencies.....	(310) 826-6712
Water Conservation.....	(310) 458-8972
Billing Office.....	(310) 458-8224

Visit our website:

www.smgov.net/departments/publicworks/water.aspx

Santa Monica City Council Meetings:

2nd & 4th Tuesdays of each month

Council Chamber

1685 Main Street, Santa Monica

www.smgov.net/cityclerk/agendas.aspx

Metropolitan Water District of Southern California

(213) 217-6850

www.mwdh2o.com

California Department of Public Health

Division of Drinking Water and Environmental Management

(818) 551-2004

www.cdph.ca.gov/certlic/drinkingwater

U.S. Environmental Protection Agency

Office of Ground Water & Drinking Water

Safe Drinking Water Hotline (800) 426-4791

<http://water.epa.gov/drink>

<http://water.epa.gov/drink/guide>





City of
Santa Monica®

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WATER DIVISION
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*This brochure is printed with vegetable-based inks
on paper made from recycled paper.*